At the opposite extreme there are many observers who disregard the plate examination entirely and place their sole reliance on the fluoroscopic examination, and in the recognition of various functional disturbances. In this regard, the report by Lippman of the diagnostic value of reverse peristalsis in the duodenum as indicative of duodenal ulcer may be cited. The middle ground would seem to be the safest, that is a screen examination combined with as many plates as occasion permits, a careful study of the plates for evidence of organic defect, with due consideration of the evidence of functional disturbances and finally the careful correlation of the Röntgen evidence with the clinical evidence before reaching the final diagnosis.

More or less attention has been directed to the ileocecal region since Lane's work on intestinal stasis, but Case's recent work on the ileocecal valve is a definite contribution. The matter is not as yet settled, and it still remains to be proven that the presence of an insufficient ileocecal valve as demonstrated by the bismuth enema calls for operative repair of the valve.

Considerable interest has been displayed in the X-ray study of the appendix, the general consensus of opinion being that an appendix which fills but fails to empty as readily as the cecum must come under suspicion. An appendix fixed by adhesions may oftentimes be demonstrated by fluoroscopic examination.

From Boston comes the plea for earlier recognition of carcinoma of the stomach and the belief is stated that the X-ray allows of earlier recognition than any of our other methods. An annular widening of the pylorus is described by George as the earliest manifestation of carcinoma at the pylorus, but no satisfactory explanation is given for the occurrence of this annular widening. However, such an observation coming from George demands our consideration.

In the study of diseases of the urinary tract a note of warning has been sounded in the use of the silver salts for pyelography. They must be used with due care, which means that they must not be injected with pressure, but should be allowed to flow in slowly by gravity.

Jackson has made two reports on an interesting observation on the sella turcica in epilepsy. He has found that in a large percentage of the cases of idiopathic epilepsy the sella is small and the clinoid processes practically roof it in. This is an observation worthy of further study.

From abroad the greatest interest has recently centered in various means of rapidly locating foreign bodies.

Belfield has advocated the injection of silver salts into the seminal vesicles through the vas deferens, as an aid in the diagnosis of vesicle disease. The method needs further study.

As previously stated the introduction of the Cooledge tube has given a great stimulus to Röntgenotherapy, especially deep therapy. From the continental clinics there have been an ever increasing number of reports on the treatment of myomata, menorrhagia and metrorrhagia, and there

is no doubt that these conditions can be markedly benefited by proper Röntgenotherapy.

In Hodgkin's disease, lymphosarcoma and leukemia the X-ray produces marked clinical improvement. In malignant diseases there is a growing hope that the more modern methods of treatment may still yield results. At the present time all post-operative cases should be thoroughly and immediately treated. Thorough treatment means the division of the skin area into small squares and the administration of full doses of hard filtered rays over each area, not merely the exposure of the skin area for a few moments once or twice a week.

Tuberculosis of the glands yields readily to Röntgenotherapy and all cases should have the benefit of this form of treatment, unless the glands have broken down, in which case they should be drained and the region subsequently rayed. The rapidity with which some of the old post-operative sinuses heal is most gratifying. Bronchial glands yield quite readily also to the Röntgenotherapy.

There have been some interesting papers on the treatment of pulmonary tuberculosis. One of the earliest was by Gibons of Denver, but this attracted little attention. Kuepferle reports some very convincing experimental work in animals and a series of 42 clinical cases with apparent cures in all but the advanced cases. Frankel also reports good results in a series of 80 cases. The method is being used to some extent in this country, but as yet no convincing reports have appeared.

In tuberculosis of bones and joints there are many satisfactory reports and it is probable that this method will soon have more general acceptance.

Several interesting articles have appeared on the treatment of thyroid enlargements, very satisfactory results following the treatment of the enlargements of adolescence although the gland frequently does not return to normal size. In exophthalmic goitre the reports seem to indicate cure in about fifty per cent. of the cases, with clinical improvement in about twenty-five per cent. more. The treatment should be directed over the region of the thymus as well as over the thyroid itself. In cystic goitre the results are less satisfactory, some decrease in the size of the gland being obtained, but rarely a return to the normal size.

MASTOID OPERATION DEPENDENT UPON PATHOLOGY.*

By CULLEN F. WELTY, M. D., San Francisco.

For some thirty years or more, the duration of a discharging ear put it in one group or another in regard to operative procedure. In this paper, I wish to deal with children under 15 years of age with discharging ears that have lasted one year, or more. This one year period was established long ago by surgeons more eminent than myself.

I wish to show by a series of operated cases that a radical mastoid should not be done as a routine procedure, as many of the cases will recover by the simple operation. In other words, the pathologic findings before and during opera-

^{*} Read before the Pacific Coast Oto-Ophthalmological Society, San Francisco, June 15-18, 1915.

tion, should determine the kind of operation to

The only contra-indications to the acute mastoid operation in chronic suppurative otitis media in children under 15 years of age, may be divided into two groups, those that may be present prior to operation and those that are found during the operative procedure. All cases of proven tuberculosis of the ear, should be excluded.

Group I (a) Acute exacerbation of the chronic suppuration associated with cerebral symptoms;

(b) Vertigo, nausea and vomiting, nystagmus or

facial paralysis;

(c) By ear examination, acute or chronic labyrinthitis, or destruction of the labyrinth, fistulæ of the labyrinth, or a case that will react to the fistula symptom, also partial, or complete destruction of the tympanic wall, true cholesteatoma.

Group 2 (a) Cholesteatoma;

(b) Fistulæ of the semi-circular canals;

(c) Such extensive bone disease of the walls of the attic and antrum, that it cannot be removed with certainty.

This paper is based upon twelve cases. They were all double mastoids. Two of the cases were acute exacerbations of chronic suppuration. They all recovered from the discharge but one.

This particular case was well for some months, returning with a fistula through the bony attic wall. The reason this was not seen prior to operation, was because it was one of the cases of acute exacerbation with the meatus almost closed. I do not understand why it was not seen in the after treatment. My only explanation, is that it was mistaken for the perforation of the drum membrane and was finally healed completely.

As I said before, this case returned with a discharge and granulations coming from this perforation, low down on the tympanic wall. must have been a slow, carious process going on within the tympanic cavity. However, this never gave any distress. The case will have to be reoperated.

Schwartze was the first to do a mastoid operation that looks something like the operation we do at present, for acute mastoiditis. This was done for acute and chronic cases. Some of the chronic cases did not recover and at this time Stacke described an operation that was to cure the chronic cases particularly. This held for some time, or rather, divided the honors with the Schwartze operation.

Neither one of them was satisfactory until Zaufal combined the two operations, calling it the radical mastoid operation, used only in chronic suppurative otitis media, while the Schwartze method became the accepted procedure for the acute process. The Stacke operation is only done at the present time when the sinus is so far forward that no other operation is possible.

In 1904, Jansen was doing an operation in chronic suppurative cases that never became popular enough to have a name. In this procedure, he took most of the posterior wall down, but did not disturb the annulus tympanicus. He also took away as much of the attic wall as was possible in a given case, leaving the ossicles in place, so that

they could be seen during, or at the completion of the operation. He did not disturb the posterior membranous meatus. The case from this on, was treated as we treat our acute mastoid operations of to-day. This procedure was not entirely satisfactory and it was abandoned.

Some time after this Heath of London introduced a universal operation for acute and chronic This consisted in cutting down the posterior wall to the annulus tympanicus, destroying all the mastoid cells, cutting the posterior membranous canal and pushing it into this newly made cavity. The outer wound was closed; further treatment through this posterior hole in meatal

This procedure is not entirely satisfactory in the hands of all men. In fact, no one operative procedure will be good in all cases.

With the array of facts as I have presented them, you can see why I have gone to the Schwartze operation in only selected cases.

I maintain that by going down to hard bone over your entire cavity, in cases such as I have selected, your hearing will be as good, or more than likely better than it was before the operation. Also the after-care of the ear will be eliminated and that will be a great factor. Furthermore, if the case does not entirely recover, you always have the radical mastoid to complete the procedure.

THE ORIGIN AND ENDING OF THE DR. **IORDAN MUSEUM OF ANAT-**OMY, ETC., ETC.

By DR. J. F. GIBBON, San Francisco.

Fifty years ago I visited London the first time. Before I left San Francisco a friend gave me a list of sights to be seen there. In the list was the Dr. Kahn Museum of Anatomy, Titchburn street top of the Hay Market. I went to it and paid one shilling (25 cts.) admission. A book was handed me entitled "The Philosophy of Marriage and Catalogue of Dr. Kahn's Museum."

After seeing it through I concluded it was gotten up to make practice for Dr. Kahn by exhibiting models of venereal diseases and effects of self abuse. All of the bad cases were cured by Dr. Kahn, whose office was attached to the museum. I brought Dr. Kahn's book with me and read it crossing the Atlantic on the way home.

Some years after I read in Dr. Acton's work on the reproductive organs, mention of a railway official who paid Dr. Kahn £500 (\$2,500). Soon after he found out he had been victimized by Kahn, brought suit against him for the recovery of his money and the court declared Kahn a fraud. The judgment was for full amount with costs, which Kahn had to pay. At the next session of Parliament an act suppressing the Kahn Museum was passed that drove it out of England.

Some time later, the Jordan Museum was opened on the east side of Montgomery street, between California and Pine streets, on the ground floor. It was there some time and afterwards moved to the south side of Market street, near